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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/792,214

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Sheng-Ping Zhong

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EXAMINER

PREBILIC, PAUL B

ART UNIT

PAPER NUMBER

3774

MAIL DATE

DELIVERY MODE

10/31/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/792,214	<b>Applicant(s)</b> ZHONG, SHENG-PING	
	<b>Examiner</b> Paul B. Prebilic	<b>Art Unit</b> 3774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 26,36,37,42 and 43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26,36,37,42 and 43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Election/Restrictions***

Claims 22-25 and 40 were withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the communication filed February 6, 2006. **These claims were cancelled by the amendment filed March 26, 2007.**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 26, 36, and 37 rejected under 35 U.S.C. 102(b) as being anticipated by Hampton et al (US 4,263,188) as evidenced by the product description of XAMA-7 at ichemo.it. Hampton anticipates the claim language where the polycarbonate-polyurethane composition is the binder of Hampton in that NeoRez EX-467 and NeoRez R-960 (see column 2, lines 33-53) is polycarbonate-polyurethane and it is substantially the same source material NeoRez-985 disclosed by the Applicant; see page 7, lines 22-24 of the present specification. The polyfunctional cross-linking agent as claimed is XAMA-7 of Hampton that is a polyfunctional aziridine; see column 2, lines 53-63 and the abstract. XAMA-7 is the same preferred material as the Applicant; see page 8, line 19-23 of the present specification. It is noted that the body of the claim can be read without reference to the preamble so the preamble does not further limit the claim language.

XAMA-7 is a trifunctional aziridine based upon intrinsic evidence from the manufacturer; see the attached document describing this material, first column thereof. This document was found at: [http://www.ichemco.it/docforn/XAMA7\\_BE.pdf](http://www.ichemco.it/docforn/XAMA7_BE.pdf).

Regarding claim 37, the bioactive agent is not positively required by the present claim language so the limitation is fully met by Hampton.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 26, 36, 37, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shults et al (US 4994,167) in view of Bontinck (US 5,541,251) or Tsuei (US 5,643,669) or Hampton (US 4,263,188). Shults meets the claim language where BAYBOND 123 (see column 13, lines 11-46 of Shults) is a polycarbonate-polyurethane composition that is equivalent to Applicant's Bayhydrol 123 (see page 8, lines 1-3 of the specification) and wherein the organic acid functional groups are the carboxylate groups on the polymer backbone; see column 13, lines 11-27. On column 13, lines 52-55, Shults states that a crosslinking agent is added to the polymer to make the polymer. It appears that the claims do not preclude the n-methyl-2-pyrrolidone contained in each of these dispersions; see columns 13 and 14 of Shults. The coating composition contains a polyfunctional crosslinking agent as claimed that is an excess of cross-linking agent which is enough to crosslink some of the functional groups and

provide functional groups capable of reacting with a bioactive agent. The bioactive agent is not positively required. The carbodiimide crosslinking agent Shults is a polyfunctional crosslinking agent with two functional groups per molecule but not three or more as claimed. However, Bontinck (see column, lines 29-48 and Table III on column 21), Tsuei (see column 5, line 45 et seq.) or Hampton (see column 2, lines 53-63) teaches that it was known to utilize trifunctional aziridines in the reaction of similar coating in the same coating art. Therefore, it is the Examiner's position that it would have been prima facie obvious to utilize a coating in Shults that contained a trifunctional crosslinking agent for the same reasons that the secondary reference utilize the same.

Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shults, Hampton, Tsuei and Bontinck as applied to claims 26, 36, 37, and 43 above, and further in view of Nishimura et al (US 4,888,285) or Compere et al (US 4,287,305) or Guire (US 4,979,959). One could reasonably interpret the claims are requiring a molar excess with respect to all organic acid functional groups. However, the prior art, as exemplified by Nishimura (see column 6, line 4 et seq.) or Compere (see the column 3, lines 1-18 and the abstract) or Guire (see column 12, line 43 et seq. or column 13, line 32 seq.), knew to use a molar excess of crosslinking agent or reactant in order ensure that the reaction went to as close to 100% completion as possible. Therefore, it is the Examiner's position that it would have been obvious to utilize an excess of crosslinking agent with respect to all organic acid functional groups of Shults in order to ensure that the reaction goes to as close to 100% completion as possible or for the reasons that Nishimura, Compere, or Guire utilize the same.

### ***Response to Arguments***

Applicant's arguments filed August 7, 2008 have been fully considered but they are not persuasive.

The Applicant argues that Shults is not intended to be used in the body and that Shults does not need three functional groups per molecule as claimed; see page 5 of the response, beginning at the last two paragraphs on this page. However, the Examiner asserts that the present claims do not require that the coating be used in the body. Even the Applicant argues that Tsuei (US 5,783,303) is relevant art and it is not for use in the body; see page 4, last paragraph of the response. Therefore, the Examiner asserts that the claimed invention is clearly obvious and does not preclude coatings that are not intended to be used within the body of an individual.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Applicant should specifically point out the support for any amendments made to the disclosure, including the claims (MPEP 714.02 and 2163.06). Due to the procedure outlined in MPEP 2163.06 for interpreting claims, it is noted that other art may be applicable under 35 USC 102 or 35 USC 103(a) once the aforementioned issue(s) is/are addressed.

Applicant is respectfully requested to provide a list of all copending applications that set forth similar subject matter to the present claims. A copy of such copending claims is respectfully requested in response to this Office action if the application is not stored in image format (i.e. the IFW system) or published.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Paul B. Prebilic whose telephone number is (571) 272-4758. He can normally be reached on 6:30-5:00 M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Isabella can be reached on 571-272-4749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Paul Prebilic/  
Paul Prebilic  
Primary Examiner  
Art Unit 3774